



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,097	02/26/2002	Choe Min-Cheol	2693-114	2669

6449 7590 01/09/2003

ROTHWELL, FIGG, ERNST & MANBECK, P.C.
1425 K STREET, N.W.
SUITE 800
WASHINGTON, DC 20005

EXAMINER

HEWITT, JAMES M

ART UNIT	PAPER NUMBER
----------	--------------

3679

DATE MAILED: 01/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/082,097

Applicant(s)

MIN-CHEOL, CHOE

Examiner

James M Hewitt

Art Unit

3679

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☒ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☒ Other: *Attachment A*.

DETAILED ACTION

Oath/Declaration

b1 The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the citizenship of the inventor.

Drawings

Figures 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

Art. Unit: 3679

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In line 5 of the abstract, "consists of" constitutes legal phraseology, and thus should be replaced.

The disclosure is objected to because of the following informalities: on page 2 line 13, "toothed hook 9" should be "toothed hook 10"; on page 4 line 5, "collect" should be "collector"; also, the disclosure should be carefully reviewed and edited for proper English (grammar, phrasing, etc.). For instance: on page 1, lines 4-13 constitute one run-on sentence; on page 1 lines 20-21, the phrase "fixed to inside of the external device" is improper; on page 2 line 12, the phrase "the toothed hook 10 of the cartridge A is worked in advance" is improper.

In addition, throughout the disclosure (on page 1 lines 5-7, on page 3 lines 3-4 and 13-15, on page 5 lines 2-5, on page 8 lines 11-13 and in the abstract), the metallic hook is said to be inserted and fixed between the main body and the cap *when* the cap is adhered to the main body by high frequency waves (or *during* the adhesion process by high frequency waves). Stating that the hook is inserted and fixed between the main body and the cap *when* the cap is adhered to the main body by high frequency waves is not considered feasible. It is apparent that the hook (300) must be inserted on the main body prior to the cap being adhered to the main body by high frequency waves, and the hook is fixed between the main body and the cap as a result of the cap being adhered

to the main body. The examiner attributes this error to error introduced through translation of the disclosure from Korean.

In making corrections to the specification, applicant should take care to not introduce any new matter into the disclosure.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 lines 4-6, the hook (300) is said to be inserted and fixed between the main body (100) and the cap (200) *when* the cap is adhered to the main body (100) by high frequency waves. The examiner finds this unclear and confusing as it is apparent that the hook (300) must be inserted on the main body prior to the cap being adhered to the main body by high frequency waves, and the hook is fixed between the main body and the cap as a result of the cap being adhered to the main body. Stating that the hook is inserted and fixed between the cap and main body when the cap is adhered to the main body implies that the hook is fixed and inserted *at the same time* or *while* the cap is adhered to the main body. This is not considered feasible. For examination purposes, the limitation "a metallic hook (300) inserted and fixed between the main body

(100) and the cap (200) when the cap (200) is adhered to the main body (100) by high frequency waves” will be considered to require a metallic hook inserted and fixed between the main body and cap. The limitation “when the cap (200) is adhered to the main body (100) by high frequency waves” has not been afforded patentable weight. For one, it conveys something which is not feasible and which seems to not accurately describe applicant’s invention. And two, the apparent intended limitation (that the hook is inserted on the main body prior to the cap being adhered to the main body by high frequency waves, the hook being fixed between the main body and the cap as a result of the cap being adhered to the main body) constitutes a method, or step thereof, for assembling the cartridge, and does not serve to limit the claim in any structural sense.

or its intended meaning (that the hook is inserted on the main body before the cap is adhered to the main body) is rooted in a method, or a step thereof, for assembling the cartridge. The limitation has not been afforded significant patentable weight since it constitutes a method step in an apparatus claim.

In claim 1 line 8, the phrase “inclined elastic flaps (320) *sloped arranged* around the hook body” is awkward and confusing. It is unclear as to what is meant by “sloped arranged”. For examination purposes, the phrase “inclined elastic flaps (320) *sloped arranged* around the hook body” will be considered as if it were written “elastic flaps (320) arranged around the hook body at an inclined angle relative to the hook body”.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hama et al (US 5,692,784) in view of Knohl (US 2,712,262).

With reference to Figure 6, Hama et al discloses (as prior art) a cartridge for fixing a collector (110) comprising: a main body (106); a cap (108) fixed (by caulking) to the main body (106); and a metallic hook (112) inserted and fixed (in groove 106a) between the main body (106) and the cap (108). In Figure 6, the hook is positioned between the rightmost surface of cap (108) and an inner surface of main body (106). Hama et al fails to teach that the metallic hook includes inclined elastic flaps arranged around the hook body at an inclined angle relative to the hook body, and three to four horizontal elastic flaps which are formed between the inclined flaps. In Figures 4-8, Knohl teaches a retainer (10a) for centering and preventing tilting of a tube or pipe. The retainer is formed of sheet metal having a plurality of inclined elastic flaps (14a) and three horizontal elastic flaps (16a) formed between the inclined flaps around the retainer body. Refer to Attachment A, which shows the three horizontal flaps between the inclined flaps. Given that applicant has used the term "elastic" to describe his metallic flaps, and based on the following dictionary definition of elastic, Knohl's sheet metal flaps are considered to be elastic flaps in that sheet metal is flexible and can easily resume its original shape after being bent (stretched or deformed). *e-las-tic (f-làs'tik) adjective*

1. a. Easily resuming original shape after being stretched or expanded; flexible. See synonyms at flexible. b.

Springy; rebounding.¹ It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the hook (112) of Hama et al with the retainer (12a) as taught by Knohl in order to center and prevent tilting of a tube or conduit inserted and fixed to tube joint (100) so that fluid passing through the conduit and joint is delivered more efficiently and effectively.

It should be noted that metal is not normally described as "elastic", but given the fact that applicant describes his metallic flaps as elastic, and based on the above definition of the term, the examiner has considered Knohl's flaps to be elastic. Applicant has not stated that the metal used for his hook is a metal that is uniquely elastic, and the examiner considers applicant to be using the term in more of a broad or general sense, taking a meaning more close to the term "flexible", and not in the sense of how a rubber band, for example, is considered elastic.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nakazumi et al '019, McFarland et al '978, Guest '022, Rho '002, Guest '023, Guest '284, Guest '246, Olson '451, Guest '999, Guest '591, Hosono et al '019, Guest '530, Guest '865, Moretti '457 and Guest (GB 2,131,903) all constitute relevant prior art devices.

¹ *The American Heritage® Dictionary of the English Language, Third Edition* copyright © 1992 by Houghton Mifflin Company. Electronic version licensed from INSO Corporation; further reproduction

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M Hewitt whose telephone number is 703-305-0552. The examiner can normally be reached on M-F, 930am-600pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on 703-308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

jmh

jmh

January 2, 2003

James M. Hewitt
PATENT EXAMINER
ART UNIT 3679